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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,594	06/07/2006	Ivan W. Ong	Q87052	3282
23373 7590 01/21/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
LANGMAN, JONATHAN C				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
01/21/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/563,594

**Applicant(s)**

ONG ET AL

**Examiner**

JONATHAN C. LANGMAN

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-12,14-18,24-50,52-56 and 62-65 is/are pending in the application.
- 4a) Of the above claim(s) 28-50,52-56 and 62-65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-12,14-18 and 24-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Drafts/Person's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 4, 2010 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-12, 14-18, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Appleton et al. (US 6,663,877), in view of Sakai et al. (WO/0023524, wherein US 6,750,283 is referenced for its English translation).

Regarding claims 1-3, 5-10, 17, and 24, Appleton et al. teach an artificial marble that comprises cultured marble onyx and solid surface materials and further comprises a resin matrix either with or without a filler (col. 1, lines 25-30). Appleton teaches adding at least one antibacterial agent to the artificial marble in order to provide a contribution over the prior art (col. 2, lines 42-63). Therefore Appleton teaches a

composite comprising marble (an aggregate), a resin (polymeric binder, see col. 3, lines 1-25), an antibacterial agent (col. 3, lines 45-col.4 line 45), and a curing agent (col. 5, line 10-15). Since the materials are the same as instantly claimed, it is the Examiners position that the composite of Appleton will have an appearance similar to that of natural stone.

Appleton teaches that the antimicrobial agent is dispersed in the polymeric matrix (col. 3, lines 45-52). Appleton also teaches that the solid surface has an outer surface with an antimicrobial effect effectiveness within 24 hours, which shows that the agent tends to migrate towards the surface (col. 3, lines 50-55).

Furthermore, Appleton goes on to teach that the resin is a thermoset resin such as unsaturated polyester (col. 3, lines 1-7). Appleton teaches that the antimicrobial agent comprises organic materials such as 5-chloro-2-(2,4-dichlorophenoxy)phenol commercially known as Triclosan or Microban ( see at least Appleton, col. 4, lines 29-45 and instant specification [0042]). The applicant teaches that antimicrobial agents such as Triclosan exhibit a migration towards the surface of the composite especially in conjunction with a polyester binder (see instant specification [0042] and [0043]).

Since Appleton teaches the same materials as instantly disclosed and claimed it is expected that they will behave in the same manner, i.e. the antimicrobial agents will be migratory which exhibit controlled migration through the binder to the surface of the composite material.

It has been held that where the claimed and prior art products are identical or substantially identical in structure or are produced by identical or a substantially

identical processes, a *prima facie* case of either anticipation or obviousness will be considered to have been established over functional limitations that stem from the claimed structure. *In re Best*, 195 USPQ 430, 433 (CCPA 1977), *In re Spada*, 15 USPQ2d 1655, 1658 ( Fed. Cir. 1990). The ***prima facie*** case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed products. *In re Best*, 195 USPQ 430, 433 (CCPA 1977). Since Appleton teaches the same materials it is inherent that the antimicrobial agent will be homogeneously distributed in the polymeric binder such that the antimicrobial agent migrates through said polymeric binder.

Appleton never specifically mentions that the microbial agent exhibits "controlled migration" through the polymeric binder to the surface of the composite. However this limitation does not structurally distinguish from the art taught by Appleton. The limitations provides for a migratory antimicrobial agent, Appleton, has been shown to be Migratory. No limitation is to be inferred from "controlled" since the applicant has not defined how to "control" the migration".

Appleton teaches that the aggregate is present in amounts of as low as 20 weight percent up to about 75% by weight (Col. 4, lines 60-65), however Appleton is silent to the amount of aggregate being between 85 to about 95%, as well as is silent to the amount of polymeric resin binder present in the composite.

Sakai teaches a similar countertop (col. 8, line 61) to that of Appleton, that comprises a marble or granite aggregate (col. 3, lines 40-48), resin binders such as unsaturated polyester, epoxy, and PMMA (col. 7, lines 35-40) (it is noted here that these

three binders are all seen in the working examples of Appleton), curing agent (col. 7, lines 42), and an antimicrobial agent (col. 8, lines 59-67). Sakai teaches that the aggregate is present in amounts of 60, 80, and 95% or more (col. 4, lines 50-60), and that the resin binder is present in amounts of 40, 20 and 15% or less (col. 7, lines 46-52).

It would have been obvious to use the amounts of aggregate and resin given in Sakai for the composite material of Appleton, as Sakai has shown that these are workable and known ranges that would provide a composite material with desirable aesthetics for their intended end use. These obvious known and taught ranges in the art overlap those ranges instantly claimed.

Regarding claims 11 and 12, the binder is taught to comprise monomers such as styrene (col. 3, lines 20).

Regarding claims 14-16, and 18, Appleton et al. teach that the antimicrobial agent may comprise quaternary ammonium compounds (col. 4, lines 30-35). The organic compound is taught to be present in an amount of 0.1% or greater. This range overlaps the instantly claimed ranges.

Appleton teaches a composite material comprising antimicrobial agents in an amount of 0.1 or 0.5% or more. However, Appleton is silent to the exact ranges instantly claimed. However as admitted by the applicant on paragraph ([0046] and [0047]). "Those skilled in the art are capable of matching the appropriate antimicrobial material with the appropriate binder. Likewise those skilled in the art are capable of determining the appropriate loading of antimicrobial agent into the composite structural

material". Therefore a routineer in the art would have found it obvious to choose polyester as a binder and Triclosan as an antimicrobial agent, in the amounts instantly claimed, as it has been shown that determining these constituents and loading amounts only involves routine skill in the art. The position of choosing unsaturated polyester as a resin binder is further supported in that Appleton teaches a working example in table 1 with unsaturated polyester resin as the binder, and also in that Sakai only limits themselves to three choices for the resin binders (unsaturated polyester, epoxy or methacrylate based resins). In light of this disclosure, the ranges taught in claims 14, 15 and 18, would have been obvious.

Regarding claims 25 and 26, Appleton teaches that the composite is formed into a finished product such as bathroom vanities and countertops (col. 2, lines 50-65)

Regarding claim 27, Appleton teaches that the composite comprises dyes and pigments (i.e. coloring agents) (col. 5, lines 10-15).

Claims 1-3, 5-12, 14-18, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al., (WO/0023524, wherein US 6,750,283 is referenced for its English translation) in view of Payne (US 2003/0096545) or Ramirez et al. (EP 1428805).

Regarding claims 1, 5-7, 14-18 and 24, Sakai et al. teach a composite structural material comprising a natural aggregate (col. 3, lines 45-50), a polymeric binder, a curing agent (col. 7, lines 35-45), and an antimicrobial agent (col. 8, lines 59-67). Sakai

teaches that the aggregate is preferably greater than 80 wt percent and less than 95% of the total weight of the composition (col. 4, lines 49-60) and the resin (polymeric binder) is preferably less than 20 wt % of the total composition (col. 5, lines 5-10) thus overlapping the instantly claimed ranges.

Since the materials are the same as instantly claimed, it is the Examiners position that the composite of Sakai will have an appearance similar to that of natural stone.

Sakai is silent to the antimicrobial agent being an organic antimicrobial agent, and only teaches inorganic materials (col. 8, lines 60-67) as viable options for the antimicrobial agent. Sakai is further silent to the antimicrobial agent being migratory, and exhibiting controlled migration through the binder to the surface of the composite material.

Payne teaches that antimicrobial agents are well known to those skilled in the art. And that by incorporating one or more antimicrobial agents into a composite material such as kitchen countertops results in the antimicrobial agent diffusing or migrating to the surface through the plastic such that the surface is continuously antimicrobial for years. Payne goes on to teach that Triclosan and quaternary ammonium products are all typical antimicrobial agents and well known in the art ([0005], [0007], and [0008]).

In light of Payne's teachings it would have been obvious to use either triclosan or quaternary ammonium salts as the antimicrobial agent for Sakai, as Payne recognizes that these are well known antimicrobial agents in the art, have uses in countertops, and



would exhibit controlled migration to the surface through the plastic (in this case the resin binder) of Sakai, in order to allow continuous microbial action for years.

Ramirez teaches using organic antimicrobial agents mixed with cementitious aggregates, wherein Triclosan is preferred in amounts of 0.1-5.0 wt %. It would have been obvious to a person having ordinary skill in the art at the time the present invention was made to use Triclosan as an alternative antimicrobial agent in the cementitious composition of Sakai et al., since Triclosan is a known organic antimicrobial component in the art for providing biocidal protection to solid surfaces such as concrete.

Triclosan, as a substitute of the antimicrobial agent of Sakai, as proposed in the combination, results in the same composite and the same materials as instantly claimed. Therefore the composite is expected to behave in the same manner as instantly claimed, i.e. be migratory, and exhibit controlled migration through the polymeric binder to the surface of the composite. The applicant teaches that Triclosan migrates through polymeric resin binders, therefore, it is expected that the combination of Sakai with Ramirez or Payne will also produce a composite where Triclosan migrates through the polymeric binder. It has been held that similar materials will possess similar characteristics (see in re best case law applied above).

Choosing an effective amount of the antimicrobial agent, to include the amounts instantly claimed is well within the grasp of a routineer in the art and would have been an obvious modification to the combination of Sakai and Ramirez or Payne.

Regarding claim 2, the natural aggregate may be granite, marble, quartz, glass, pottery etc (col. 3, lines 45-50).

Regarding claims 3 and 27, the composite comprises a filler, a pigment, or a colorant (col.3, lines 60-64 and col. 6, lines 57-65).

Regarding claims 8-12, Sakai teaches that the resin (polymeric binder) may be polyester or methyl methacrylate (col. 7, lines 40-col. 8 ,lines 50).

Regarding claims 25 and 26, Sakai teaches using the composite as a kitchen counter (col. 8, lines 62).

Claims 1-3, 5-12, 14-18, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al. as applied to claims 1-13, and 19-27 above, in view of Appleton (US 6,663,877).

Regarding claims 1, 5-7 and 14-18, Sakai et al. teach a composite structural material comprising a natural aggregate (col. 3, lines 45-50), a polymeric binder, a curing agent (col. 7, lines 35-45), and an antimicrobial agent (col. 8, lines 59-67). Sakai teaches that the aggregate is preferably greater than 80 wt percent and less than 95% of the total weight of the composition (col. 4, lines 49-60) and the resin (polymeric binder) is preferably less than 20 wt % of the total composition (col. 5, lines 5-10) thus overlapping the instantly claimed ranges.

Since the materials are the same as instantly claimed, it is the Examiners position that the composite of Sakai will have an appearance similar to that of natural stone.

Sakai teaches a composite comprising an inorganic antimicrobial agent. Sakai is silent to the use of organic antimicrobial agents. Appleton teaches a composite material in the same art as Sakai (col. 2, lines 40-65). Appleton goes on to teach that the antimicrobial agent may be inorganic, organic, or combinations thereof, with the inorganic materials overlapping those taught by Sakai (col. 8, lines 60-67), and the organic antimicrobial agents comprising Triclosan (col. 3, line 45- col. 4, lines 40). Appleton teaches that the amount of antimicrobial agent is 0.1 or 0.5% or more, thereby overlapping the instantly claimed ranges. It would have been obvious to a person having ordinary skill in the art at the time the present invention was made to use inorganic antimicrobial agents such as Triclosan, as an alternative antimicrobial agent in the cementitious composition of Sakai et al., since Appleton has shown that organic antimicrobial agents, such as Triclosan, are functionally equivalent and interchangeable with the inorganic antimicrobial agents taught by Sakai.

Appleton is silent to the exact ranges of organic antimicrobial agents instantly claimed. However as admitted by the applicant on paragraph ([0046] and [0047]). "Those skilled in the art are capable of matching the appropriate antimicrobial material with the appropriate binder. Likewise those skilled in the art are capable of determining the appropriate loading of antimicrobial agent into the composite structural material". Therefore a routineer in the art would have found it obvious to choose polyester as a binder and Triclosan as an antimicrobial agent, in the amounts instantly claimed, as it has been shown that determining these constituents and loading amounts only involves routine skill in the art.

Regarding claim 2, the natural aggregate may be granite, marble, quartz, glass, pottery etc (col. 3, lines 45-50).

Regarding claims 3 and 27, the composite comprises a filler, a pigment, or a colorant (col.3, lines 60-64 and col. 6, lines 57-65).

Regarding claims 8-12, Sakai teaches that the resin (polymeric binder) may be polyester or methyl methacrylate (col. 7, lines 40-col. 8 ,lines 50).

Regarding claim 24, Sakai teaches overlapping ranges and therefore it is expected that the antimicrobial agent is present in an amount sufficient to demonstrate commercially acceptable efficacy against a microbe of concern.

Regarding claims 25 and 26, Sakai teaches using the composite as a kitchen counter (col. 8, lines 62).

### ***Response to Arguments***

The 35 U.S.C. 102 (e) rejections over Appleton were removed in light of the applicant's amendment to claim 1 to include a specific aggregate amount outside that range taught by Appleton.

In the response dated January 4, 2010, starting on page 18, in regards to Appleton in view of Sakai, applicant asserts that claim 1 recites a composite material comprising antimicrobial agents that can exhibit controlled migration through the polymeric binder, and in order to retain that characteristic the antimicrobial agent must be soluble in the polymeric resin. The applicant asserts that Appleton does not teach or suggest this element and Sakai fails to correct the deficiency.

The Examiner disagrees. Appleton teaches similar materials, such as polymeric binders, and Triclosan as the antimicrobial agent. A material and its properties are inseparable. Since Sakai teaches the same materials as instantly claimed (i.e. polyester polymeric binder, and Triclosan antimicrobial agent) it is inherent that the antimicrobial agent is soluble in the polymeric resin. Thus, it is inherent that the composite material of Appleton comprises antimicrobial agents that can exhibit controlled migration through the polymeric binder.

The applicant argues that the teachings of Appleton to require continued surface restoration in order to maintain the antimicrobial effectiveness, is a teaching away from a migratory antimicrobial agent.

On page 19 of the remarks, applicant asserts that Appleton only teaches the outer surface of the polymeric resin has an antimicrobial effectiveness, and that the antimicrobial agents of Appleton are deposited on the surface, such that the outer surface of the polymeric matrix has an antimicrobial effectiveness. This assertion is found to be in error since Appleton teaches that the antimicrobial agent is dispersed throughout the composite and throughout the matrix (col. 3, lines 46-49). Furthermore the teaching of restoration, shows that antimicrobial agents are dispersed throughout the whole of the composite.

On page 20, applicant asserts that the "restoration" process taught by Appleton is not required by the instant invention, and therefore is clear that Appleton does not teach a composition having migratory antimicrobial agents.

The applicant appears to be arguing a more narrow definition of "a migratory antimicrobial agent that exhibits controlled migration through the polymeric binder to the surface of the composite material". Appleton suggests using Triclosan as an antimicrobial agent, and therefore inherently teaches a composition having migratory antimicrobial agents.

All materials will tend to be migratory to some degree, this is a basic concept of diffusion where materials in higher concentrations tend to migrate towards areas of lower concentration. This is especially true in forming composites. This concept is seen in Appleton where the originally formed composite, takes 24 hours for the antimicrobial agent to diffuse towards the surface. This antimicrobial agent is thus "migratory".

The applicant is reminded that they are claiming a product, the instant limitations of exhibiting controlled migration are all intended end uses. The structure of the final product instantly claimed is merely a composite comprising an antimicrobial agent at the surface. Appleton teaches this exact structure and therefore for reasons set forth above, is maintained.

On pages 21-23, applicant asserts that there is no suggestion or motivation to utilize the amount of aggregate and resin of Sakai in the composite of Appleton. Applicant asserts that the amount of aggregate in Sakai would yield undesirable results in Appleton.

Appleton never limits their amount of aggregate per se, that is there is no clear teaching away in Appleton, of using amounts of aggregate, higher than 75% by weight.

Therefore it was and still is the examiners position that using the effect amounts of aggregate as well as polymeric binder as taught by Sakai, for the amounts of aggregate in Appleton, would have been an obvious modification for a routineer in the art in order to obtain a desired aesthetic appearance or desired properties as is recognized by the applicant (pages 21-23 of the response).

It is also noted that Appleton teaches that the countertops are similar to those found in US patent 3,847,865 (Appleton, col. 3, lines 40-45) which actually teaches Corian countertop comprising a filler of 20-85% ('865, col. 1, lines 15-20).

The applicants also assert that one skilled in the art would not be motivated to use the amounts of aggregate of Sakai as the amounts of aggregate in Appleton, because of the difference in mesh size and difference in methods of making the material. In response to applicant's arguments, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). It was and still is the Examiners position that utilizing the amounts of aggregate and amounts polymeric resin binder taught by Sakai to form a composite countertop comprising aggregate, polymeric binder and antimicrobial agents, would have been obvious to a routineer in the art to apply to the composite countertop of Sakai that comprises an aggregate, polymeric binder, and antimicrobial agents.

On pages 25 and 26 of the response, applicant asserts that Ramirez obtains a composition comprising Triclosan, aggregate and a polar aqueous solution such as water. The applicant asserts that Triclosan is a hydrophobic agent requiring non polar medium to solubilize, and that if one skilled in the art were to utilize the method taught by Ramirez in the composition of Sakai, Triclosan will be disposed on the surface of the composite materials as another inorganic aggregate. Ramirez is not used for its polar mediums or its methods of making a composite material. Note that while Ramirez et al do not disclose all the features of the present claimed invention, Ramirez et al. is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely that Triclosan is known for providing antimicrobial effectiveness to a composite, and in combination with the primary reference, discloses the presently claimed invention.

The rejections over Schweizer were removed for their lack of teaching motivation to combine Triclosan into countertops. However Payne, supports the examiners position that Triclosan would have been obvious to use in Sakai, and is now applied.

On page 27 of the remarks, in reference to the rejections over Sakai in view of Appleton, applicant asserts that Appleton does not teach migration of the antimicrobial agent. However for much of the same reasons stated above, the obvious choice of Triclosan when used in the composite of Sakai, will exhibit migratory behavior because



Sakai teaches polymeric resins, and it is has been established on the record that that Triclosan or other organic antimicrobial agents are migratory in polymeric resins.

The applicant has not addressed the rejection, in that the rejection sets forth that it would have been obvious to use the organic antimicrobial agents taught by Appleton as an alternative to the inorganic antimicrobial agents taught by Sakai, as Appleton has shown a functional equivalency between inorganic and organic antimicrobial agents. The applicant has not persuasively argued or shown why it would not have been obvious to use the organic antimicrobial agents, such as Triclosan, taught by Appleton, as the antimicrobial agent in Sakai.

On page 28 of the response, the applicant asserts that the presently claimed invention achieves unexpected results by having a composition that exhibits antimicrobial migration neither taught nor appreciated by Sakai and Appleton. However as set forth above, all materials will be to some degree migratory, and this position is supported by the teachings of Appleton, which shows that it takes 24 hours for the antimicrobial effectiveness to take place (for the antimicrobial agent to migrate to the surface). Also the applicant is arguing a more narrow definition of the claims then they are entitled to. The claims are to a final product that has an antimicrobial agent present at the surface. Appleton and Sakai teach this composite with the same structure as instantly claimed.

Although Appleton teaches that surface "restoration" must be used, this is not a teaching away from the claims as presented, since the structure of the claims only requires an antimicrobial agent at the surface.

Furthermore, this surface "restoration" may be expected by one of routine skill in the art, since all of the working examples of Appleton teach inorganic antimicrobial agents which would not be soluble in the polymeric resins. However, "applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others." In re Courtright, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). Appleton teaches that an alternative to the inorganic antimicrobial agents is organic antimicrobial agents, including Triclosan (Appleton, col. 4). Triclosan would inherently be "migratory" as this concept has been well established on the record. Finally this would not be an unexpected result because it is acknowledged by Payne (US 2003/0096545, col. 1) that Triclosan migrates through polymeric resins.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN C. LANGMAN whose telephone number is (571)272-4811. The examiner can normally be reached on Mon-Thurs 8:00 am - 6:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCL

/Timothy M. Speer/  
Primary Examiner, Art Unit 1794